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Heart Failure

CLINICAL SCENARIO OF ACUTE HEART FAILURE SYNDROME BEFORE CARDIAC RESYNCHRONIZATION THERAPY PREDICTS LONG-TERM PROGNOSIS

ACC Moderated Poster Contributions
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Background: Acute heart failure syndrome (AHFS) can be classified into three main types of clinical scenario (CS). Although most of patients with reduced left ventricular (LV) ejection fraction (EF) considering cardiac resynchronization therapy (CRT) have already experienced AHFS, the impact of the classification in on the effect of CRT is unclear. This study aimed to assess whether each CS of AHFS before CRT has different prognosis.

Methods: Two hundred one patients (LVEF 24±8%, QRS 161±39 ms) with a history of AHFS before CRT were studied. Patients were divided into 3 groups based on systolic blood pressure at admission for AHFS (CS1: >140, CS2:100-140 and CS3: <100 mmHg). Response to CRT was defined as improvement of at least one NYHA class and LV reverse remodeling assessed by a decrease of LV end-systolic volume index > 15% at 6 months of CRT.

Results: The number of patients with CS1, 2 and 3 were 8 (4%), 116 (58%) and 77 (38%), respectively. Baseline parameters and the response to CRT were comparable among three groups. However, the CS3 group showed higher incidence of cardiac events including death, LV assist device implantation and cardiac transplantation (p<0.001, Figure). The frequency of readmission due to heart failure was higher in the CS1 group than the other two groups (p<0.001) despite relatively low mortality.

Conclusions:Clinical scenario of AHFS before CRT is a parameter to forecast long-term prognosis of heart failure, independent of the response to CRT.